

REMARKS

The Non-Final Office Action of December 15, 2006, has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the instant application are respectfully requested. Claims 1-26 are pending. Claims 1, 4, 8, 10-13, 16, 22, and 24 have been amended. No new material has been added.

Rejections Under 35 U.S.C. § 102

Claims 4-5 and 16-17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0095486 A1 to Bahl (“Bahl”). Applicant respectfully traverses this rejection.

Claim 4 recites, among other features:

“listening for transmissions by said station; and
updating said entry for said station responsive to every transmission by said station.”

Bahl fails to disclose the recited features. Instead, Bahl at paragraph [0045] describes transmitting a signal to a location manager 230 of a Mobile A 218 requesting a location update responsive to a time differential exceeding a pre-defined threshold. Bahl is silent with respect to updating an entry for a station responsive to every transmission by the station as recited. Claim 4 is allowable for at least this reason.

Dependent claim 5, which depends from claim 4, is allowable for at least the same reasons as claim 4.

Amended independent claim 16 recites features similar to those described above with respect to claim 4. Thus, claim 16 is allowable for at least those same reasons.

Dependent claim 17, which depends from claim 16, is allowable for at least the same reasons as claim 16.

Claims 8 and 20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0121810 A1 to Goransson et al. (“Goransson”). Applicant respectfully traverses this rejection.

Claim 8 recites, among other features:

“adjusting said basis beam to cover said station responsive to determining said station is not covered by said basis beam.”

Goransson fails to disclose the recited features. Instead, Goransson at paragraphs [0025] and [0026] describes using open loop transmit diversity signaling to provide for downlink beamforming directed toward each mobile user. Goransson at paragraph [0026] describes that antenna weights forming a beam are determined by uplink measurements. Goransson is silent with respect to adjusting a basis beam (i.e., adjusting antenna weights) responsive to determining a station is not covered by a basis beam. Thus, Goransson fails to disclose the features as recited in claim 8. Claim 8 is allowable for at least this reason.

Claim 20 recites, among other features:

“means for determining if a station is covered by a basis beam.”

Goransson fails to disclose the recited features. As per the discussion above with respect to claim 8, Goransson at paragraph [0026] relies on uplink measurements in formulating antenna weights. Goransson fails to disclose the step of determining if a station is covered by a basis beam as recited. Thus, Goransson fails to disclose all of the features as recited in claim 20. Claim 20 is allowable for at least this reason.

Claims 25 and 26 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,043,272 B2 to Park et al. (“Park”). Applicant respectfully traverses this rejection.

Claim 25 recites:

“An access point comprising:
... determining the angle of arrival of said packets”

The Office Action at pages 3-4 contends that Park (col. 8, lines 45-63) demonstrates the recited features. Applicant respectfully disagrees. More specifically, Applicant submits that Park fails to disclose determining the angle of arrival at an access point. Notably, Park at col. 8, lines 56-59 demonstrates that a terminal calculates a user pilot signal for each time area and feeds a time area number corresponding to the greatest power back to a base station. Thus, in Park, the

“determining” is conducted at the terminal. Accordingly, Park fails to disclose the recited features. Claim 25 is allowable for at least this reason.

Dependent claim 26, which depends from claim 25, is allowable for at least the same reasons as claim 25.

Rejections Under 35 U.S.C. § 103

Claims 1-3 and 13-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goransson in view of U.S. Patent No. 7,130,663 B2 to Guo. (“Guo”). Applicant respectfully traverses this rejection.

Claim 1 recites, among other features:

“ forming a select beam to cover said mobile station, said select beam formed responsive to said header.”

Notwithstanding whether the combination of Goransson and Guo is proper, the resultant combination fails to teach or suggest the recited features. Goransson at paragraphs [0026] and [0037] demonstrates determining beamforming parameters in response to conventionally available uplink measurement information, such as those beams that exhibit the strongest uplink power and/or quality measurements. Goransson fails to teach or suggest “forming a select beam to cover a mobile station, said select beam formed responsive to said header” as recited. Guo fails to cure the deficiencies of Goransson. Guo (Title, Abstract, col. 2, line 35 – col. 7, line 67) demonstrates adaptive beam forming using a feedback signal. Guo fails to teach or suggest “forming a select beam to cover a mobile station, said select beam formed responsive to said header” as recited. Thus, the combination of Goransson and Guo, even if proper, fails to teach or suggest the recited features. Claim 1 is allowable for at least these reasons.

Dependent claims 2-3, which each depend from claim 1, are allowable for at least the same reasons as claim 1.

Amended independent claim 13 recites features similar to those described above with respect to claim 1. Thus, claim 13 is allowable for at least those some reasons.

Dependent claims 14-15, which each depend from claim 13, are allowable for at least the same reasons as claim 13.

Claims 6-7 and 18-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bahl in view of Park. Applicant respectfully traverses this rejection.

Dependent claims 6-7 each depend from claim 4. Park fails to cure the above noted deficiencies of Bahl with respect to claim 4. Thus, notwithstanding whether the combination of Bahl and Park is proper, the resultant combination fails to teach or suggest the features recited in claim 4, from which claims 6-7 depend. Claims 6-7 are allowable for at least these reasons.

Dependent claims 18-19 each depend from claim 16. Park fails to cure the above noted deficiencies of Bahl with respect to claim 16. Thus, notwithstanding whether the combination of Bahl and Park is proper, the resultant combination fails to teach or suggest the features recited in claim 16, from which claims 18-19 depend. Claims 18-19 are allowable for at least these reasons.

Claims 9-12 and 21-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goransson in view of Park. Applicant respectfully traverses this rejection.

Dependent claim 9 depends from claim 8. Park fails to cure the above noted deficiencies of Goransson with respect to claim 8. Thus, notwithstanding whether the combination of Goransson and Park is proper, the resultant combination fails to teach or suggest the features recited in claim 8, from which claim 9 depends. Claim 9 is allowable for at least these reasons.

Claim 10 recites, among other features:

“ decoding at an access point a first part of a transmitted packet to determine the angle of arrival of said transmitted packet as transmitted from a mobile station...”

Notwithstanding whether the combination of Goransson and Park is proper, the resultant combination fails to teach or suggest the recited features. The recited “decoding” occurs at an access point. As already discussed with respect to claim 25, Park fails to teach or suggest this feature but rather teaches away from the recited features, instead performing the decoding at a terminal. Goransson fails to cure the deficiencies of Park. Thus, claim 10 is allowable for at least these reasons.

Dependent claim 11, which depends from claim 10, is allowable for at least the same reasons as claim 10.

Amended independent claim 12 recites features similar to those discussed above with respect to claim 10. Thus, claim 12 is allowable for at least those same reasons.

Dependent claim 21 depends from claim 20. Park fails to cure the above noted deficiencies of Goransson with respect to claim 20. Thus, notwithstanding whether the combination of Goransson and Park is proper, the resultant combination fails to teach or suggest the features recited in claim 20, from which claim 21 depends. Claim 21 is allowable for at least these reasons.

Amended independent claim 22 recites features similar to those discussed above with respect to claim 10. Claim 22 is allowable for at least those same reasons.

Dependent claim 23, which depends from claim 22, is allowable for at least the same reasons as claim 22.

Amended independent claim 24 recites features similar to those discussed above with respect to claim 10. Thus, claim 24 is allowable for at least those same reasons.

It is believed that no fee is required for this submission. If any fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

All rejections having been addressed, Applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same.

Respectfully submitted,
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